

Claims

1. A luminous element comprising:

a light-guiding device in which light is guided by reflection, the light-guiding device comprising at least one light-scattering area that has at least one light-scattering structure and at least one light entry surface, wherein the at least one light-scattering structure are on a surface of the at least one light-scattering area;

at least one OLED coupled to the at least one light entry surface, the at least one OLED comprising a transparent substrate coupled to the at least one light entry surface; and

a light guiding plate, wherein the light guiding plate and the transparent substrate are plate-shaped and are coupled at an edge surface to the light-guiding device.

2. The luminous element according to claim 1, wherein that the light-guiding device comprises a transparent material.

3. The luminous element according to claim 2, wherein that the transparent material comprises a material selected from the group consisting of a glass, a coated glass, a glass/plastic laminate, a plastic, a fluid, and any combinations thereof.

4. The luminous element according to claim 3, wherein the at least one light entry surface is arranged at an edge surface of the light guiding plate.

5. The luminous element according to claim 1, wherein that the at least one light entry surface is arranged at an edge surface of the light guiding plate.

6. The luminous element according to claim 1, wherein the light-guiding device has an elongated cylindrical shape or an elongated prismatic shape.

7. The luminous element according to claim 1, wherein the at least one light entry surface is arranged on at least one side of the light guiding plate.
8. The luminous element according to claim 1, wherein the transparent substrate is flexible.
9. The luminous element according to claim 8, wherein the transparent substrate comprises a material selected from the group consisting of a polymer, extremely thin glass, and a composite of extremely thin glass and polymer.
10. The luminous element according to claim 1, wherein the light entry surface and/or the at least one OLED has at least one specular reflective surface.
11. The luminous element according to claim 1, wherein the light entry surface and/or the at least one OLED has and/or an optical grating.
12. The luminous element according to claim 1, wherein the at least one OLED is of strip-shaped form.
13. The luminous element according to claim 12, wherein the at least one OLED has contact surfaces that extend along a longitudinal direction of the at least one OLED.
14. The luminous element according to claim 1, wherein the at least one OLED is coupled to the light-guiding device by a transparent bonded joint.

15. The luminous element according to claim 1, wherein the at least one light entry surface is arranged obliquely to a light guidance direction.
16. The luminous element according to claim 1, wherein the at least one light entry surface is curved.
17. The luminous element according to claim 1, wherein the at least one light-scattering structure is arranged in an interior of the light-guiding device.
18. The luminous element according claim 1, wherein the at least one light-scattering structure comprises a roughened surface area.
19. The luminous element according to claim 18, wherein the roughened surface area has a roughness that increases along a light guidance direction.
20. The luminous element according claim 1, wherein the at least one light-scattering structure is colored.
21. The luminous element according claim 1, wherein the at least one light-scattering structure comprises at least one structure selected from the group consisting of a raised pyramid structure, a recessed pyramid structure, a convex lens, a concave lens, a raised prism, a recessed prism, a convex cylindrical lens, a concave cylindrical lens, and any combinations thereof.
22. The luminous element according claim 1, wherein the at least one light-scattering structure comprises an optical grating.
23. The luminous element according claim 1, wherein the at least one OLED comprises a plurality of OLEDs.

24. The luminous element according to claim 23, wherein the plurality of OLEDs emit light of different color.

25. The luminous element according claim 1, wherein the at least one OLED emits white light.

26. The luminous element according claim 1, wherein the at least one light-scattering area has a light exit surface that is larger than the at least one light entry surface.

27. The luminous element according claim 1, wherein the at least one OLED is coupled to the at least one light entry surface via a coupling element.

28. The luminous element according to claim 27, wherein at least one OLED comprises a number of OLEDs that are coupled to the at least one light entry surface via the coupling element.

29. The luminous element according to claim 27, wherein the coupling element has at least two different coupling surfaces.

30. The luminous element according claim 1, wherein the light-guiding device has an annularly bent shape.

31. The luminous element according claim 1, wherein the light-guiding device has shape selected from the group consisting of a cylindrical shape, a semicylindrical shape, a tubular shape, a conical shape, and a prismatic shape.

32. A luminous element comprising:

a light-guiding device wherein light is guided by reflection, the light-guiding device having at least one light-scattering area that has at least one light-scattering structure, a light entry surface, at least one OLED coupled to the light entry surface, and a light exit surface that has at least one edge surface of a light guiding plate, wherein the light entry surface is arranged on at least one side of the light guiding plate.